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ON THE COVER

DIRECTOR of photography Charles G. Clarke, A.S.C., and some of the production crew who worked tirelessly seven days a week for months in Germany in order to make authentic on-the-scene shots of the Berlin Airlift for 20th Century-Fox's "The Big Lift." In foreground, from left to right, are George Seaton, director; Clarke; Louis Kunkle, operator; and actor Paul Douglas. Seated in right foreground is Erich Kuechler, German assistant cameraman. Clarke's own personal story of filming "The Big Lift" appears in this issue, beginning on page 158.

—Photo courtesy U.S. Army Air Force

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AMERICAN SOCIETY OF CINEMATOGRAPHERS

FOUNDED January 3, 1919, The American Society of Cinematographers is composed of the leading directors of photography in the Hollywood motion picture studios. Its membership also includes non-resident cinematographers and cinematographers in foreign lands. Membership is by invitation only.

The Society meets regularly once a month at its clubhouse at 1782 North Orange Drive, in the heart of Hollywood. On November 1, 1920, the Society established its monthly publication "American Cinematographer" which it continues to sponsor and which is now circulated in 62 countries throughout the world.

Dominant aims of the Society are to bring into close confederation and cooperation all leaders in the cinematographic art and science and to strive for pre-eminence in artistic perfection and scientific knowledge of the art.

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Hollywood
Bulletin Board

Ray Rennahan Elected A.S.C. President

Hal Mohr, Alfred Gilks, John Boyle and Charles Rosher also elected new officers of the Society for 1950-51.

RAY RENNAHAN
New President

THE AMERICAN Society of Cinematographers, last month, elected Ray Rennahan its president for 1950-51, succeeding Charles G Clarke who retires after serving his second term as head of the Society. Other new officers elected are Hal Mohr, second vice-president, Alfred Gilks, treasurer; John Boyle, secretary; and Charles Rosher, sergeant-at arms. Reelected for another term are Fred Jackman, executive vice-president; Arthur Edeson, first vice-president, and William V. Skall, third vice-president.

The board of directors for the coming year — in addition to the officers named above — will include Charles G Clarke, George Folsey, Lee Garmes, Victor Milner, Sol Polito, Leon Shamroy and Joseph Walker. Board alternates are John Arnold, Sol Halprin, Milton Krasner, Arthur Miller and John Seitz

CHARLES CLARKE
Retiring President

Ray Rennahan assumes the presidential chair of the Society well qualified to carry on with the progressive program instituted under the leadership of retiring-president Clarke. Having served as secretary since May, 1945, Rennahan has worked closely with Society officers for the past five years and has contributed much in sound thinking toward the progressive planning of the Society which has resulted in the completion of such projects as modern projection facilities in the clubhouse, the Picture Of The Month awards program, etc.

A cinematographer since 1921, Rennahan joined the A.S.C. in 1938. He is one of Technicolor Corporation's ace directors of photography, and currently is in Hawaii, directing the photography on the second unit of M-G-M's "The Pagan Love Song."

A two-time Academy Award winner, he received an Oscar in 1939 for the Technicolor photography of "Gone With The Wind" in association with Ernest Haller, A.S.C. In 1940 he was awarded another Oscar for his direction of Technicolor photography of "Blood And Sand," in association with Ernest Palmer, A.S.C. His cinematographic artistry also left its mark on such outstanding motion pictures as "Chad Hanna," "Victory Through Air Power," "For Whom The Bell Tolls," "The Three Caballeros," "Duel In The Sun," "The Perils of Pauline," "The Paleface," "A Connecticut Yankee," and others

In a note of acceptance to the Society, following news of his election cabled him in Hawaii Rennahan said: "I am deeply honored that my fellow members have chosen me president of the Society, and happy that I shall continue working with virtually the same men who have served as officers and board members for the past two years. Working harmoniously together, we have accomplished many important things for the Society during the past year and I am sure, that by continuing this cooperation, we shall forge ahead to greater accomplishments."

The Board of Governors, in unanimously reelecting Fred Jackman vice-president for the seventh consecutive year, reaffirmed the Society's confidence in Jackman's ability to direct the Society's business affairs. Although Jackman long ago retired from directing motion picture photography, he continues one of the cinematographers' strongest champions and has worked tirelessly with Charles Clarke in establishing the Society's program of Picture Of The Month awards as a means of obtaining wider recognition for the work of Society members.

DEWEY WRICLEY, A.S.C., veteran director of photography died suddenly at his home April 20th, following a heart attack. He was 52 years of age. A cinematographer for the past 30 years, he had been with Paramount Pictures since 1932. He was preparing to leave for Japan, at the time of his death, on a temporary assignment for 20th Century-Fox.

Serving as Lt. Commander with the U.S. Navy during the war, Wrigley received several decorations and citations for his work under fire, including two Purple Hearts. He was the Navy photographer who recorded events as the Japs signed Armistice terms on the U.S.S. Missouri.

Surviving are his wife, Amelie; a son, Dewey, Jr., and a daughter. Burial was at Forest Lawn, in Glendale, April 26.

●

PAUL MANTZ is piloting camera plane which Tom Tutwiler is using in filming aerial shots for R K O's "Jet Pilot."

●

JOHN SEITZ, A.S.C., is being smothered with accolades for his superb cinematography of Paramount's "Sunset Boulevard," rated by reviewers as ranking among the all-time picture greats. Accordingly, a picture to tab for Academy Awards.

●

JOHN BOYLE, A.S.C., will go to Japan to fill cinematographic assignment for 20th Century-Fox vacated through the untimely death of Dewey Wrigley.

●

RAY FERNSTROM, A.S.C., whose inventive mind is ever at work between cinema-

(Continued on Page 171)

CORRECTION

An item in this department last month stated that Karl Freund had resigned from Warner Brothers "to devote all his time to managing the affairs of his Photo Research Corp., in Burbank." Karl has since informed us that he has resigned from Warners, but *not* from directing photography. While he will continue to direct the affairs of his growing photo products business, which specializes in developing new and advanced aids to motion picture photography, henceforth he will freelance as a cameraman, making his expert services available to any and all studios.—EDITOR

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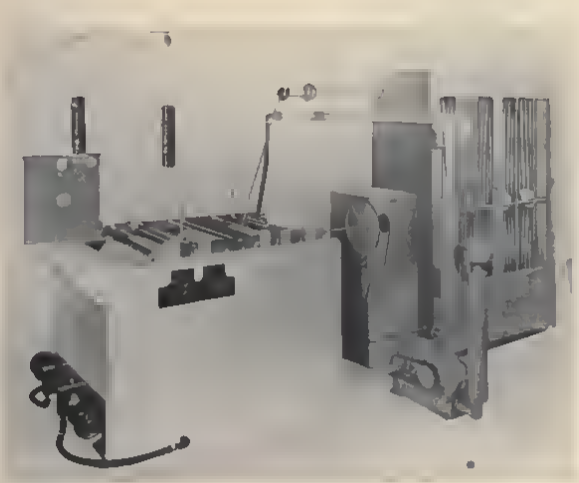

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Current Assignments of A.S.C. Members

Major film productions on which members of the American Society of Cinematographers were engaged as directors of photography during the past month

Columbia

• FLOYD CROSBY, "The Brave Bulls," with Mel Ferrer, Miroslava, Eugeoe Iglesias, Anthony Quinn, Jose Torvay aod Charlita Robert Rossen, director

• LESTER WHITE, "Freddie The Great," with Mickey Rooney, Terry Moore, William Demarest and Ross Ford. Peter Godfrey, director

• CHARLES LAWTON, "Stage To Tucson," with Rod Cameron, Wayne Morris, Ralph Murphy, director

• BURNETT GUFFEY, "The Bedside Manner," with Larry Parks and Barbara Hale Eddie Buzzell, director

• JOSEPH WALKER, "Harriett Craig," with Joan Crawford, Wendell Corey, K T Stevens, aod William Bishop Vincent Sherman, director,

• HENRY FREULICH, "When You're Smiling," with Jerome Courtland, Lala Alhright, Frankie Laine, Kay Starr, Boh Crishy, The Mills Brothers, The Modernaires, and Billy Daniels Joseph Santley, director

M-G-M

• ROBERT SURTEES, "King Salomon's Mines," (Technicolor) with Deborah Kerr, Stewart Granger, Richard Carlson and Hugo Haas Compton Bennett, director

• WILLIAM SKAAL, "Kim," (Technicolor) with Errol Flynn, Dean Stockwell, Paul Lukas, Cecil Kellaway, Arnold Moss Victor Saville, director

• ALFRED GILKS, "The Tender Hours," with Jane Powell, Ricardo Montalban, Louis Calhern, Ann Harding, Phyllis Kirk Roy Rowland, director

• HAROLD ROSSEN, "To Please A Lady," with Clark Gable and Barbara Stanwyck. Clarence Brown, director

• CHARLES ROSHER, "Pagan Love Song," (Technicolor — shooting in Hawaii) with Esther Williams and Howard Keel Robert Alton, director.

Monogram

• WILLIAM SICKNER, "Sideshow," with Don McGuire, Eddie Quillan, Tracey Roberts and Richard Foote Jean Yarbrough director

• GILBERT WARRENTON, "County Fair," with Rory Calhoun, Jan Nigh and Florence Bates, William Beaudine ,director

• WILLIAM SICKNER, "Snow Dog," with Kirby Grant, Elena Verdugo, Ric Vallin and Chinook Frank McDonald, director

Paramount

• CHARLES LANG, "Branded," with Alan Ladd, Mona Freeman, and Charles Bickford Rude Mate, director

• JAMES WONG HOWE, "Tripoli," (Technicolor) with Maureen O'Hara, John Payne, and Howard da Silva Will Price, director

• VICTOR MILNER, "Dark City," (Hal Wallis Prodn.) with Wendell Corey, Elizabeth Scott, Viveca Lindfors and Don DeFore William Dieterle, director

R.K.O.

• J ROY HUNT, "Treasure Of Los Alamos," with Tim Holt, Richard Martin, Jane Nigh, Inez Cooper, Julian Rivero and House Peters, Jr George Archinbaud, director

• WINTON HOCH, "Jet Pilot," (Technicolor) with John Wayne, Janet Leigh, J C Flippeo, Paul Fix and Richard Rober Josef von Sternberg, director

• HARRY WILD, "Smiler With A Gun," retitled "His Kind of Woman," with Robert Mitchum, Jane Russell, Vincent Price and Ian Wolfe. John Farrow, director

20th Century-Fox

• CHARLES G CLARKE, "I'll Get By," (Technicolor) with June Haver, William Lundigan, Harry James, Gloria de Haven and Dennis Day. Richard Sale, director

• JOE MACDONALD, "Stella," with Ann Sheridan, Vic Mature, David Wayne, Leif Erickson and Hobart Cavanaugh Clyde Bruyon, director

• HARRY JACKSON, "American Guerrillas In The Philippines," (Technicolor — shooting in the Philippines) with Tyrone Power, Micheline Prelle, Tom Ewell, Jack Elam and Tommy Cook Fritz Lang, director

• MILTON KRASNER, "All About Eve," with Bette Davis, Anne Baxter, Celeste Holm and George Sanders. Joseph Mankiewicz, director

• JOSEPH LASHELLE, "Old 880," with Dorothy Maguire, Burt Lancaster, Edmund Gwenn and Millard Mitchell Edmund Goulding, director

• LEON SHAMROY, "Trumpet To The Morn," with Linda Darnell, Cornel Wilde, Joseph Cotteo and Jeff Chandler. Robert Wise, director

United Artists

• FRANZ PLANER, The Dungeon," with John Ireland, Mercedes McCambridge, James Barton E. A Dupont, director

• ARTHUR MILLER, "Cost Of Living," (S Spiegel Prod.) with Van Heflin Joe Losey, director.

• WILLIAM SNYDER and JACK GRERNHALGH, "New Mexico," (In Color) (Allen-Justman Prod.) with Lew Ayres, Marilyn Maxwell, Jeff Corey, Donald Buka. Irving Reis, director

Universal-International

• CHARLES BOYLE, "Saddletramp," (Technicolor) with Joel McCrea, Wanda Hendrix, John Russell, John McIntire Hugo Fregonese, director

• RUSSELL METTY, "Desert Hawk," (Technicolor) with Yvonne De Carlo, Richard Greene, Lois Andrews and Lucille Barkley Frederick de Cordova, director

• IRVING GLASSBERG, "The Magnificent Heel," with Howard Duff, Peggy Dow, Brian Donlevy, Bruce Bennett, Ann Vernon and Lawrence Tierney Joseph Pevney, director

• CLIFF STINE, "The Milkman," with Donald O'Connor, Jimmy Durante, Piper Laurie and Joyce Holden Charles Barton, director

(Continued on Page 181)

Leading film producer, Irving Hartley of Hartley Productions, N. Y. C., shooting a scene at Chichicastenango, Guatemala, for the Pan American World Airways color travel film "Wings to Mexico and Guatemala"

Here is the Maurer 16 mm. at Chichicastenango!

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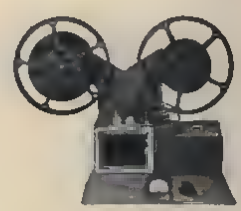

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CAMERA SHIP, used in filming scenes for "The Big Lift," was this C-82 "Flying Boxcar" with rear door removed. Director of Photography Charles G. Clarke (left) looks on as his operator, Lou Kunkle, handles the camera in shooting a follow shot of planes leaving Berlin's Tempelhof airfield, seen in distance. Much of the air filming was done purposely in bad weather to get shots typifying Airlift flying conditions.

Getting A Lift From "The Big Lift"

Shooting story of Berlin Airlift posed many challenging problems for the camera crew, obliged to film most of the scenes in bad weather.

By CHARLES G. CLARKE, A.S.C.

Director Of Photography "The Big Lift"

"THE BIG LIFT," as the title implies, is a story about the Berlin Airlift, and more important, about the daring men who flew it. Author-director George Seaton has tailored a thrilling love and adventure story, using the Berlin Airlift operations as the framework for this 20th Century-Fox production. The action is set against two termini of the Airlift — Rhein Main and Berlin — as well as much of present day Berlin itself.

While the production is not a documentary, the story demanded realistic and authentic atmosphere. All feature roles, except six, are played by Air Force personnel, thus assuring an authentic "ring" to the dialogue. Except for two studio sets, all other settings used were actual on-location interiors. Here again, realism and authenticity were the prime factors.

This concept, then, decided the photographic approach for the picture. At the risk of not receiving favorable notice for *beautiful* photography, I decided that here was one of those rare opportunities for honest, straight-forward camera reporting the people should be photographed to their best advantage but not glamourized, the settings should not be pointed up with effect or ornate lighting or by use of any of the mechanical effects we usually employ in regular studio production. This took some courage, for in Hollywood there is ever the tendency to make each new picture more glamourous than the last.

In this respect, I had the full support and confidence of director Seaton. I had long ago learned that working with this imaginative director is a delightful and inspirational experience. We had previously made "Miracle of 34th Street" together, so I knew that in the "Big Lift" assignment he would again pursue the realistic directorial approach for which he is noted. In addition to great talent and personal charm, Mr. Seaton also possesses the rare ability for making each member of his troupe a vital part of the production. Under his leadership,

we all became so enthused for creating a fine picture that we readily bent every effort toward that end. Mr. Seaton encouraged suggestions for bettering the overall production through his gracious appreciation I do not hesitate to say that his sincere show of appreciation went a long way toward enthusing our camera crew in the undertaking of extremely difficult shots, of which there are many in this picture. As the attitude of the director towards his crew directly controls the efforts of the cinematographer, I am glad to acknowledge here the cooperation and understanding for our camera crew which director Seaton displayed on this assignment.

One of the inducements for making "The Big Lift" in Germany was that it afforded opportunity for our studio to utilize some of its "frozen" funds in that country — money that had been earned there by other 20th Century-Fox releases To use such funds on this production, the studio sent a minimum number of its American personnel to Berlin. These numbered nineteen in all and included myself as director of photography; Louis Kunkle, operator; and Axel Rasmussen, camera technician. We arrived in Berlin May 8, 1949, following approval by Government and Military officials. Through UFA'S Berlin studios we engaged additional production personnel, including assistant cameramen Erich Kuechler and Ernest Ortmann, and a still man.

Fox sent over its own motion picture and still camera equipment. We spent the first week preparing our darkrooms and in training our German crew members in the handling and operation of 20th-Century and Mitchell cameras.

RESOURCEFUL camera crew produced this fork lift tractor, used it as mobile camera crane in shooting scenes at Tempelhof airfield.

At this time, the Airlift was operating planes every three minutes around the clock. We began by photographing much of the activity at both terminals of the American base of operations. We also filmed scenes at the British terminal of Gatow and at the French airport of Tegel, on the outskirts of Berlin.

While the script was being polished and awaiting approval by the various Military bureaus involved, our camera crew kept busy shooting process plates for later use. In this respect "The Big Lift" is an unusual production. Photographically it is a one-man show. All scenes were photographed by the Director of Photography — production, process plates, including the lining up and balancing of the process scenes. While this system is not advocated as general practice, it was necessary in this case and proved a valuable experience.

The amazing technical advance of the Ground Control Approach system is utilized as a story point in the picture. "G. C. A", as it is popularly termed, makes possible safe landing of planes on airstrips in the worst of weather conditions.

As the script required that many of the scenes be played in heavily overcast weather, to point up the difficulty with which the airlift was carried on, we shot many of the air scenes in stormy weather. This at once presented new problems. In the first place, the lift was operating under tremendous difficulties and the Air Force did not look with pleasure on camera ships flying around the Corridor. Secondly, the weather frequently was sufficiently bad to keep all ships grounded, so a lot of red tape had to be cut to get the necessary official permission for plane takeoffs and landings in bad weather.

Only by persistence and patience were the difficult scenes successfully photographed. Those who have seen the picture remark about the very effective aerial shots. These may be attributed to the fact that we used a C82 "Flying Boxcar" for our camera ship. The construction of this famous Fairchild plane is such that the rear of the fuselage may be removed, permitting a clear, unobstructed view and allowing panorama shots up to 170 degrees. Although two booms extended out over the top at the

(Continued on Page 172)

GERMAN crew members lifted this Fox camera crane which played important part in filming dramatic shots in ruined sectors of Berlin. Note Color-tran unit placed immediately above camera for fill light

HYDRAULIC post from castoff barber chair formed camera base for this makeshift dolly Clarke's crew made for trucking shots. Examining handiwork are, Kunkle, Ortmann, Rasmussen, Kuechler and Clarke

TINY MOTOR drives zooming mechanism of the Electra-Zoom lens, first of kind to be so controlled. Zoom may be stopped at any point within the lens' range at discretion of cameraman operating pushbutton remote control, as he watches results in camera's electronic viewfinder

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By H. I. SMITH

Chief Television Cameraman
Don Lee Broadcasting System Hollywood

A DEFINITE PROBLEM confronting television directors today is that of maintaining camera mobility during the course of a television show. It is not always easy for him to maintain a smooth flow from scene to scene and from sequence to sequence, due to the fact that the working area and facilities available to the cameraman in the television studio are usually quite limited. New camera setups must be made continuously, and sometimes very rapidly as the action proceeds. Since the show continues uninterrupted for its duration, camera movement is a definite problem. For solution of this problem, the director must rely heavily on the creative ability and skill of his camera crew.

The logical solution to the problem of camera mobility in television lies in the use of a dependable variable-focal lens which helps the cameraman to greatly minimize his camera movement. Joseph Walker, A.S.C., has made a definite contribution to the art in the production of his "Electra-Zoom" lens.

In operation, the "Electra-Zoom" lens has proven itself to be indispensable in several aspects of television programming. Its optical design is based on formulas successfully used in exacting motion picture work several years ago by Mr. Walker. The resultant television version has exhibited optical characteristics, at full aperture, well in excess of the most exacting requirements of present television systems.

This new lens is continuously variable in focal length from 3½ to 8 inches. When used with RCA Image-orthicon pickup tubes adjusted for optimum picture output, it gives a resultant approximate range of horizontal field angles from 22 to 7 degrees at infinity. The lens has a maximum optical working speed of F3.5. Under nominal operating circumstances, excellent results are obtained with 70 foot-candles incident illumination and a working stop of F5.6.

One of the most unique features of this lens is its automatic electrical zooming action. This variable-speed effect is accomplished by the push of a button. The beauty of the end-result is a picture which is entirely devoid of any eye-arresting irregularities in zoom rate or picture centering. The viewing audience is therefore drawn to or carried away from the center of interest quite unaware of the mechanics or optics involved.

It is highly advantageous to be able to adjust the field of view to meet the conditions of live action. At one of the major sports arenas in Los Angeles conditions made it impossible to move the camera during the course of a weekly ringside sports newscast. The inflexible arrangement of seating, and the unfavor-

(Continued on Page 168)

Making Punches Look Realistic

Ingenius boxing camera dolly gives prizefight closeups real "sock."

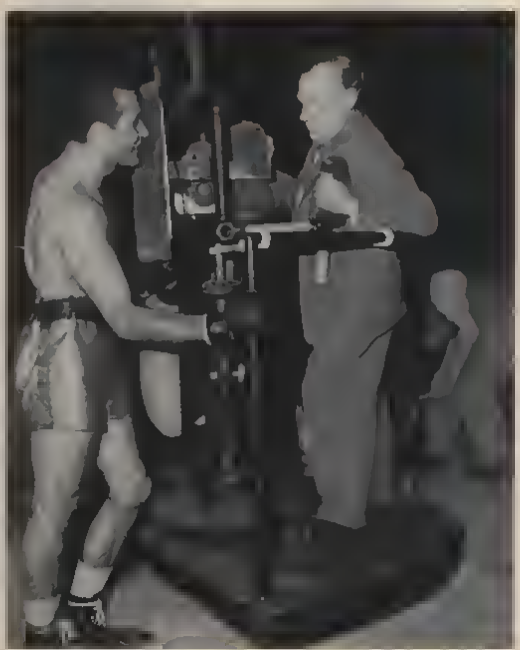
By NOBERT BRODINE, A.S.C.
Director Of Photography M-G-M's "Right Cross"

HOW WOULD YOU like to be a punching bag for a boxer — especially a movie actor-boxer with plenty of sock in his punches and a yen to make them register potently on the screen? That's what this director of photography and his assistant did in shooting scenes for M-G-M's "Right Cross," starring Ricardo Montalban, as the boxer, and Dick Powell and June Allyson.

We became, in effect, punching bags when shooting fight scenes for this picture because we took Ricardo's punches — with all his 165 pounds behind them — cushioned only by a pad of sponge rubber.

It all came about when director John Sturges wanted to point up the climactic prizefight scenes of this picture with a boxer's eye-view of his opponent's gloves socking potent rights and lefts — with the camera lens assuming the viewpoint of the boxer. To film such closeups, using an unguarded camera — not to mention an unguarded cameraman — would mean the glove-throwing boxer would have to fake or pull his punches — too obvious on the screen. What director Sturges wanted was an effect the camera would get were it strapped to the other boxer's chest and recorded his opponent's action in the infighting.

WHILE Ricardo Montalbao throws real punches at the camera's protective pads, in a test run of M-G-M's new boxing camera dolly, procedure is observed by director of photography Norbert Brodine, A.S.C. and his assistant Rob Moreno. Operating camera is Curt Fetters



NORBERT BRODINE explains operation of the boxing camera dolly to Ricardo Montalban, star of M-G-M's "Right Cross." Action is photographed with an Eyemo camera operating at 32 f.p.s. Note padded body rest for camera operator

Sturges took his problem to M-G-M's camera department head, John Arnold, a reliable man for solving cinematographic problems. Indeed Arnold's inventive ability is substantiated by a desk drawer bulging with U. S. Patent applications, most of them granted and many of them in use and saving substantially in production costs for M-G-M. In no time at all, Arnold came up with the gadget pictured on this page. After working out the preliminary details on paper, he turned them over to the studio's engineering department which had the gadget on the sound stage, ready for use, within two days.

We call the gadget a boxing camera dolly. It consists of a semicircular platform, mounted on rubber-tired swivel-casters. A metal framework of tubular steel forms a guard rail for the camera operator. Mounted on a rocking base — a semielliptical affair, heavily weighted, such as one might find supporting a boxing dummy in a gym — is a vertical metal framework on which is mounted two sponge rubber pads. One, semi-circular, has an opening in the middle to accommodate field of view of the camera lens. The camera is mounted on a separate vertical post. Extending horizontally from the iron framework is a body rest for the camera operator. This is padded with sponge rubber.

In filming closeups of a fighter in action, the fighter wades into the gadget, punching at the protective pads — the one immediately in front of the camera for head blows, and the lower pad for body blows. As the punches land, the whole framework, including the camera, rocks from the impact, giving the realistic effect of the opponent reeling from the blows. Counteracting the thrust of the fighter's blows, and

(Continued on Page 177)

Adapting Motion Picture Lighting To Television

Gus Peterson, A.S.C., lighting director of the Ed Wynn Show, reveals advantages of movie lighting techniques for video shows that are to be kinescoped.

By LEIGH ALLEN

THE ED WYNN SHOW, televised each Thursday evening in Hollywood by CBS and recorded on film for delayed telecasting from the network's eastern stations, has established a national reputation for the best lighting of any recorded show in television New Yorkers say that many of the Ed Wynn shows look as good on their receivers as live shows telecast locally. And Arthur Godfrey, in a recent telecast, reportedly paid tribute to the technical quality of the lighting.

Credit for this lighting goes to Gus Peterson, A.S.C., one of Hollywood's top directors of photography, whom CBS weaned away from the movies to supervise the lighting of the network's feature video shows. Their engineers declare the fact that the Ed Wynn Show was to be kinescoped — or recorded, as CBS prefers to term the procedure — was a big factor in the company's decision to bring in a motion picture studio lighting expert. These engineers had early observed the shortcomings of the first kinescoped shows, saw that expert lighting of the original show was the key to successful film recording of video programs. Today, Peterson also supervises lighting of the Alan Young show as well as numerous auditions, all of which are television recorded on film

It is entirely logical that this veteran director of photography was selected for this all-important post. He had long observed the early shortcomings of television and was among the first of Hollywood motion picture technicians to probe its immediate needs and study its future He was one of the first, among directors of photography, to realize what contribution the men of his craft could bring to television in the way of improved lighting methods — lighting that would enhance picture quality generally and tend to stimulate public taste for the new entertainment medium.

He had a lot of preconceived ideas about lighting a TV show when he undertook his first Ed Wynn show eight months ago Most of these were quickly modified and some were discarded entirely. For one thing, you can't have different lighting set-ups for separate takes, as in motion picture production, at least not in a show with the format of the Ed Wynn affair. Wynn's show is something like vaudeville in format Wynn comes out as MC at the beginning with nothing on stage but the curtain or backdrop. As he exits off stage, the curtain rises, revealing a feature act in which Wynn himself takes part At conclusion of the act, the curtain falls and Ed Wynn is out front again with a line of chatter or perhaps parrying quips with a guest star. This, generally, is the routine that is repeated for the entire show, always with new business, of course.

There are three television cameras on the show at all times, with a reserve camera standing by in case of emergency Two cameras are mounted on platforms set up in the audience, about fifty feet from the stage and near the center aisle. These, usually remain stationary during the show. The third camera is mobile and is moved toward or away from the stage on an extension running out into the audience section at the left. Not infrequently it travels up on and around the stage Obviously, this is the camera that gives the lighting engineer the most headaches When it moves into the wings to shoot action from the side, the lights that are key lights for the other two cameras become cross lights for him — trouble lights if they aren't correctly placed before the show so they'll be out of lens range of the mobile camera

One of the first things Peterson discovered, when he went to CBS, is that he had to compromise in his lighting because the show is recorded on film. If the show was produced only for local telecasting, he would use a different lighting technique; but because the show must be television recorded, the lighting must be very carefully controlled

Lighting equipment in studio A, where the Ed Wynn Show takes place, consists of a variety of lighting units — mostly of the type which long have furnished illumination for motion picture sets. Overhead in the flys are several banks of incandescent "scoops" or floodlights, al-

(*Continued on Page 178*)

LIGHTS are skillfully placed so they do not interfere with the cameras or the audience's view of the show Side and front lighting is lavishly used, producing more pleasing pictorial results than when overhead lighting is used entirely and makes possible better quality kinescope recordings.

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DO place your lights so as to get cross- and back-lighting, resulting in modeling of subject and more pleasing pictorial composition.

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Applying Professional Lighting To Amateur Movies

How you can get professional-like quality in your indoor photography, without costly lighting units.

By FREDERICK FOSTER

MOST OF THE FILMS made by serious amateurs today reveal increasing talent for cinematography, except for the lighting of interiors. In some cases this may be due to lack of the proper lighting equipment; but considering the rather limited areas of the average home movie interior, the amateur does not require the costly lighting units which the professionals use. The photofloods, reflector-floods and reflectorspots which were especially designed for his needs will, if properly used, supply adequate illumination for professional lighting of home movies.

The shortcoming we see in so many amateur movie interiors is that they are either too flat or excessively contrasty. The fault, in the first instance, is that a general flood of light, from one or more sources, is indiscriminately thrown on the set, with no accentuating shadows or highlights. In the other case, the light is from a single source, as a rule, so placed as to "burn up" most of the highlights and leaving heavy black shadows.

Now, how shall we correct this? We might begin with a general illumination of the scene, using two or three well-placed lamps fitted with silk or tracing cloth diffusers. This is good insurance against unpleasant shadows, but it won't give anything but a flat, well-illuminated picture. If we want the scene to have character and a professional-like appearance in the photography, we will have to build up the highlights from this foundation.

This is a good start. But now, how about the highlights and shadows that tend to give the lighting character? These can be supplied by other lighting units—not diffused—and placed here and there about the room where their beams will produce little catch lights on irregular wall surfaces, curtains, archways and furniture. The various types of photoflood lamps are fine for this purpose—particularly the reflectorflood and the reflectorspot.

The filament in a photoflood lamp is quite small; thus its light is intense enough to give a strong beam, which will accentuate highlights nicely and also cast interesting shadows, when used for this purpose. In addition, photofloods may replace ordinary table or bridgelamp bulbs to add to the naturalness of the effect, putting more highly concentrated splashes of light in the logical places.

Clearly, if the light is built up in this manner, we are likely to get so much more than merely enough illumination to make an exposure that it will be ne-

(Continued on Page 174)

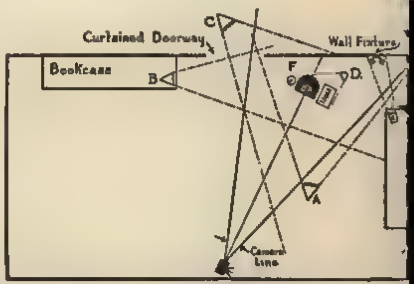

DIAGRAM described in text, illustrating simple lighting plan for typical living room that will produce professional-like pictorial results

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"The Wolf's Tale"
GEORGE A. VALENTINE
Stamford Cinema Club
Glenbrook, Connecticut

Certificate Awards

"Glamorous Guatemala"
RALPH E. GRAY
Movie Makers Club of Oklahoma City
Oklahoma City, Oklahoma

"Cup of Fear"
STAMFORD CINEMA CLUB
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ANDY POTTER
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REFLECTORS take the place of photo lamps in furnishing light for filming indoors as well as out. Here, 16mm cameramen use professional type reflectors to throw light into dark areas of porch of dwelling in order to film action there

Lighting Home Movie Interiors With Sunlight

Using reflectors to re-direct sunlight coming through windows or doors, you can photograph interiors without need for artificial light.

By JOHN FORBES

HAVE YOU EVER thought of filming movies indoors, using sunlight for illumination? The sun that furnishes light for outdoor photography can also supply light for indoor movie making, if there's a large window or door in the sunny side of the house, and often with unusual pictorial results that could only be gotten otherwise through the use of strong spot lights.

There's a trick to this, of course. Using the flood of light coming through the window alone would be distinctly one-sided lighting: the side of a face toward the window, for example, would be strongly lit, while the opposite side would be heavily shaded.

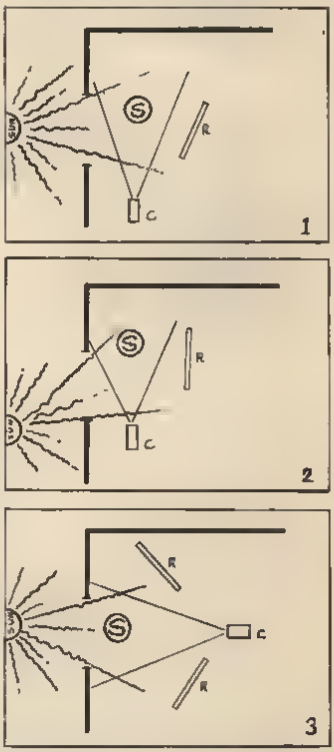
Outdoors, the answer to such a lighting problem would be to use a reflector on the shadow-side, to throw some of the sunlight back toward the dark side of the object. Well, the same thing would work quite as well indoors as out. Placing the reflector in the proper place, we could throw back enough light to brighten up those heavy shadows without flattening the picture by wiping them out entirely.

And there, in a nutshell, is the secret of making interior scenes without artificial light: we use the light from a window for the highlight side of our shot build up the illumination in the shadows with reflectors, and there you are! It's as simple as that

The simplest sort of lighting, of course, is the cross light just described, and sketched in Fig. 1. Next to that (and usually more pleasing) is a straight or three-quarter front lighting obtained by following the procedure shown in sketch 2. In this case, the window through which the light comes should be rather wide to simplify placing the reflector. Naturally, with this sort of lighting, the direct sunlight will fall on more of the background area, giving more depth to the shot Where the sun does not strike, those areas will be either a jet-black shadow or badly underexposed unless additional reflectors are provided to throw light on the background as well as on the subject.

Sometimes, too, it is possible to obtain very effective backlight effects this way, placing subject and camera as shown in sketch 3. Two reflectors will be necessary, one on each side of the camera, with one nearer the subject than the other, so that we still have a sunlight side and a shadow side For best results, in making a shot like this where the camera is shooting directly toward the window, the sunlight should come from a rather high angle, and if there is shrubbery outside the window, it will serve to block out the lower half through which we would otherwise shoot, thereby eliminating the uneven exposure that would occur between the foreground and that part of the back-

(*Continued on Page 176*)



DIAGRAMS show how sunlight, coming through a large window, may be utilized to shoot movies indoors. In Fig. 1, sunlight falls upon subject (S) and reflector R, which reflects some light back toward shadow side of subject. Camera position is shown at C. Figs. 2 and 3 show variations in use of reflectors.

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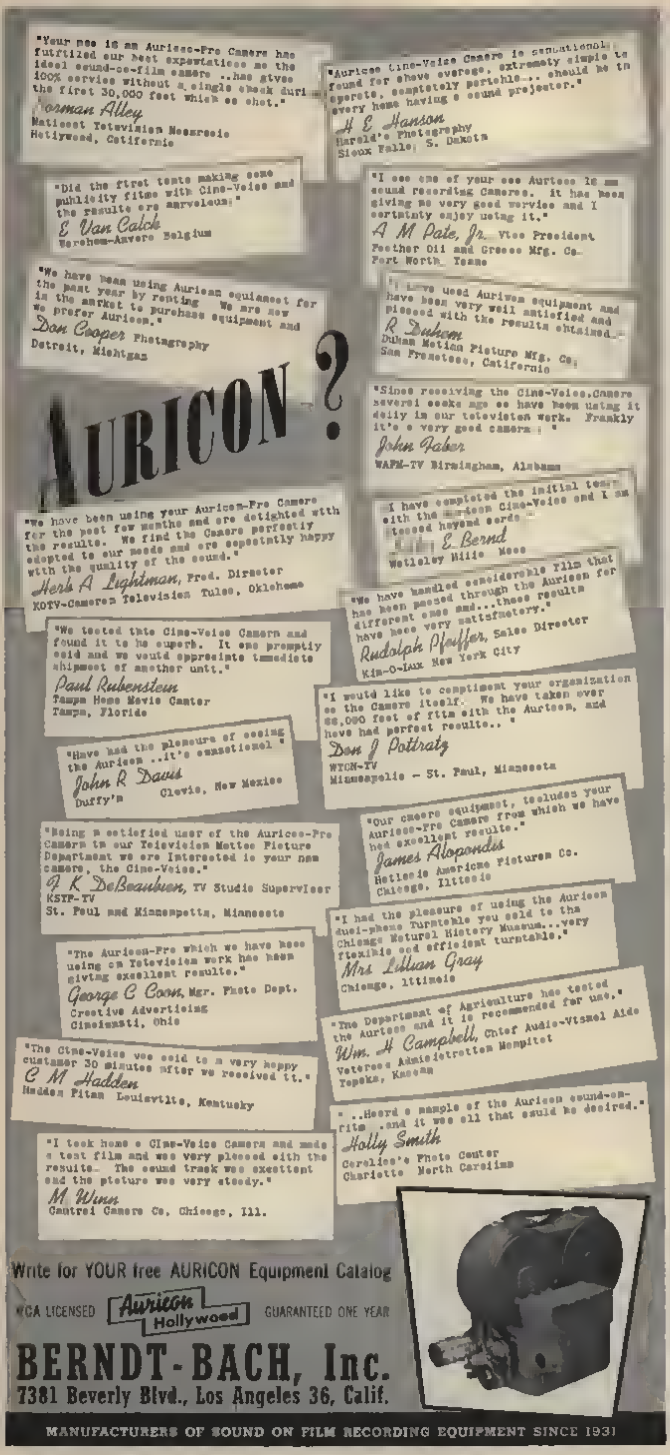
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ZOOM LENS

(*Continued from Page 160*)

able orientation of aisles in the stadium made it necessary to rely on "Electra-Zoom" lens technique entirely. With the switch from conventional high-speed lenses normally used heretofore, no change in lighting was necessary for the "Electra-Zoom." Since the program was of a nature where visiting sports celebrities appeared for interview, it was easy to frame as many as four persons in a group with this setup, and yet zoom into an individual head-and-shoulders close-up of the person constituting the center of interest. With a single camera, the show was thus transformed from an otherwise static affair into one that had considerable eye-appeal and audience interest.

In another case, the requirements for a ballet setting made it impossible to use a large camera dolly or small camera crane for shooting the show. Yet, it was necessary for the viewing audience to feel that they were entering a Viennese restaurant to witness a floor show. Set limitations were such that camera movement was restricted to a direction paralleling the front of the stage. A dolly shot in this direction combined with a wide-to-close zoom, perpendicular to the direction of dolly travel, carried the audience through the entrance hall, past and over tables, and through an arch where the dancers began their performance. As the show progressed, it was possible to keep in frame a continuously variable image of the dancers throughout the entire sequence of the dance. The pictorial impact of the dance patterns was thereby exploited to the fullest extent possible.

Very often, the presence of an audience is necessary to a television show. Any camera or lighting equipment which obscures the audience view is detrimental to normal audience reaction. "Electra-Zoom" technique makes it possible to eliminate camera dolly runways in the audience, and instead use camera parallels conveniently placed and designed for the requirements of the show. Through adjustment of the height of the camera parallels, it is possible to simulate pictorial effects normally secured through the use of cranes.

In the "Electra-Zoom" lens, the television cameraman has at his disposal a very versatile instrument, limited only by his ability to use it in the highly imaginative business of creating a pictorial illusion.

Answers to questions on all aspects of photography is provided by George Eastman House, the photographic center in Rochester, N. Y.

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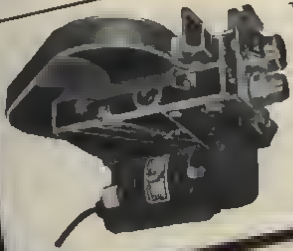

This motor will run in synchronization with either 16mm. or 35mm sound recorders. It is provided with mounting platform which permits removal of magazine while camera remains mounted on motor. Drive coupling attaches to single-frame shaft of camera and is mated to spring-steel drive arm of motor gear box. This assures that camera mechanism cannot be damaged if a film jam occurs as the spring steel arm drive will shear. This is easily replaced. A knurled knob on motor armature permits rotating for threading. "On-Off" switch built into base. Platform base threaded for ¼" and ⅜" camera tie-down screws. Rubber covered cable with plugs included.

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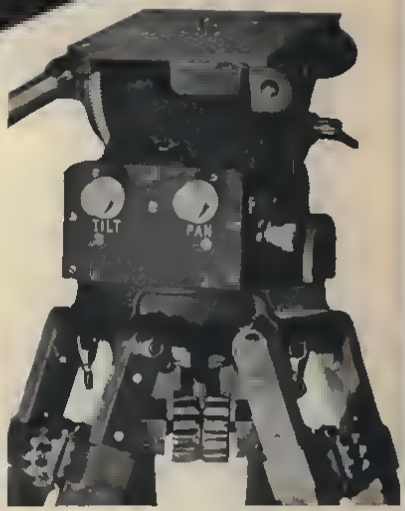

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(More Coogan Specials on Page 174)

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(*Continued from Page 154*)

tographic assignments, has come up with a "natural" in a mass sales item that fits in with the current juvenile craze for Hopalong Cassidy and other western outfits. It's a plastic horsehead which snaps over kids' tricycle handlebars converting the trike to a steed for young "Hoppy" prototypes. Sells for only a couple of bucks and bound to fatten Ray's bank account in short order.

●

PHIL TANNURA, A.S.C., meanwhile has come up with an aid to soft drink purchasers at ball parks and sports grandstands, where drinks are served in paper cups. Phil has a plastic tray punched with holes which hold several cups for spectators who must carry a number of cups of beverage at a time.

●

CHARLES ROSHER, A.S.C., is in the Hawaiian Islands, photographing in Technicolor the M-G-M production, "Pagan Love Song." A keen enthusiast for color photography, Rosher brought along his personal still and movie cameras, and will indulge a few "busmen's holidays" shooting movies and stills on his own.

●

A.S.C. has nominated for Picture of the Month Award for March, Ted McCord for "Young Man With A Horn," and Leo Tover for "When Willie Comes Marching Home."

●

SMPTE'S 67th semiannual convention, concluded in Chicago April 28, saw presented several interesting papers directly relating to motion picture photography.

Capt Don Norwood, inventor of the famous Norwood incident light exposure meter bearing his name, presented a paper on Light Measurement For Exposure Control in which he establishes a mathematical foundation for exposure meter design.

Other papers presented pertaining to matters cinematographic discussed a new 100,000,000 frame per second camera, time lapse cinematography, Eastman Kodak's new negative-positive color motion picture film; sound tests on new color print film; a new B & H T-Stop calibrating unit; a new portable 35mm. motion picture camera and the Aeme 35mm. process camera.

●

JACKSON ROSE'S new 1950 edition of the American Cinematographer Handbook and Reference Guide is off the press. Jam-packed with valuable info, too.

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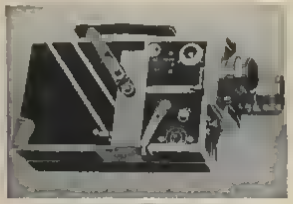
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GETTING A LIFT FROM "THE BIG LIFT"

(Continued from Page 159)

rear of the plane, by flying slightly above the ships we were photographing we successfully eliminated these booms from camera range. Many of the spectacular scenes showing Airlift ships landing at the unique Templehof airport were filmed in this way. This field is in the very heart of Berlin, surrounded by five-story apartment buildings. To approach it successfully, it is necessary for incoming planes to barely skim the rooftops for a considerable distance, then drop rapidly in to the runway, once the field is reached. To do this with a camera ship in formation required considerable skill on the part of the pilot. Fortunately, the Air Force has many men skilled in this maneuver.

As for the performance of our camera crew, only the high regard we held for our director and our great personal interest in the success of the picture made us undertake the risks we did. Because of the difficult flying conditions continually encountered and of the great number of air scenes required for the picture, the camera crew worked tirelessly seven days a week for five months in order to keep the production on schedule. Most Sundays were devoted to shooting air scenes, which left the balance of the week for production shooting on the ground. In the very beginning we were under pressure to complete all scenes in which Montgomery Clift appears, because he had another committment back in the United States. Then after these scenes were disposed of in record time, we faced a new problem: time was running out on our German leading lady, Cornell Borchers, who was committed for another picture.

Needless to say, crew, staff and cast were pretty well worn down by this time, and the German members of our crew must have had misgivings about the drive of the Americans. With the Clift scenes disposed of, we enjoyed a delightful three-day holiday. The Company chartered Adolf Hitler's former yacht for a short cruise down the Rhine. It was a rare treat for all of us, but especially for our German crew members who, until assigned to this picture, had not been permitted to leave Berlin. We had secured permission for them to go to Western Germany in order to work for us there; but being present on Hitler's yacht was an ironic experience for them. Besides, many never before had seen the fabled and beautiful Rhine valley. In Western Germany food was more plentiful, and a bountious spread was arranged for us through Press Club facilities.

"The Big Lift" will show scenes of Germany generally representative of the country. Special effort was made to select backgrounds suitable to the story, yet of varying interest so that the picture would present typical sights of the country. The Berlin street scenes are of average streets — not the most modern nor the most ancient. Scenes played in the ruins are laid against settings one may find in any section of Berlin. All action inside of planes was staged in actual planes — no sets were built for this. Obviously, serious lighting problems were encountered in working inside the planes, but the realistic result justified the effort. There are only two studio sets employed in the entire picture — both apartment suites.

As the action called for the Airlift planes to be seen from the windows of the apartment and timed with the dialogue, we employed process here because of the sound problem. We had brought along a Mitchell process projector and an operator. The dialogue scenes in the pilot's compartment of the planes were also done in process, and for these we used an actual plane.

There are two scenes that taxed our ingenuity. The first was where the camera moves from an exterior in full sunlight to the inside of a quonset hut. The change in lens stops ranged from f/16 with a G filter to f/3.2 without a filter inside the hut. In the course of the pan around, the filter was withdrawn and the diaphragm changed.

Lighting the interior of the hut was in itself a problem, as the ceiling was in the picture at all times. Lighting units had to be placed behind lockers along the walls. At no time did we ever use more than ordinary booster lighting equipment for any of the sets. For example, in the night sequence at Potsdam Platz, the windows were lit with Mazda floods, and four 5-KW lights covered the foreground action. This sequence was shot on an overcast afternoon and in the evening. Red filters before the lens reduced some of the daylight and allowed the Mazda lights to come through.

The Subway sequence is perhaps one of the most interesting I filmed. We had arranged to use one of the dead-end rail stations after the trains quit running at eleven p.m. We took our booster lights down into the terminal for the approach shots, but when our actors took their positions in one of the cars there was no place to put the lights. It was necessary to show both sides of the car. Action called for people going in and out of the car, hanging on the straps, etc.; so

side lighting was out of the question. Besides the cars had to move.

In the ceiling of the car were three small, flat dome lights. We had very small photofloods behind these and used this light for our key. The output was only four foot candles, so we utilized the modern technique of latensification. Having thus decided to resort to latensifying the film to gain additional emulsion speed, we went all the way; we put a few more 100-watt globes along the top of the cars to light the stations and tunnels as we passed enroute. Here my head gaffer, Kenny Lang, encountered a problem, too: the current was 550 volts — a matter he soon solved by stringing the hundred-watt lamps in series.

Doing a whole sequence comprising two nights' work for latensification processing required some courage, particularly as we were some 8000 miles away from our laboratory in Hollywood. However, the footage came through with complete success, proving the value of latensification as a means of saving situations where adverse lighting conditions are unexpectedly encountered. We filmed many of the scenes as the car traveled from station to station, so the backgrounds seen through the windows are actual.

The use of latensification in this instance proved that it not only helps exposure but has the ability to produce more detail in the shadows, resulting in fine photographic quality.

For the burning motor scenes, we used smoke pots placed in the cowling of the motors. This caused some confusion, when we made landings at Templehof. Invariably the crash crews, observing the smoking plane coming in for a landing, would rush out on the field with fire-fighting equipment to meet us — despite the fact they had previously been fully briefed on our filming operations. They took no chances that the "fire" might be real.

Related here are but a few highlights of a tremendous and extremely interesting overseas filming assignment. We who took part in the production cannot but feel that "The Big Lift" is truly a part of us. We are witnessing its initial reception by the public with as much sense of possession as will the studio, the director and the producer. If we have done our part well enough to make it a successful picture, then we are more than justified for the long hours of work we have put into it.

X-ray movies showing how water passes down a man's throat when drinking are a feature of the medical science exhibit in the hall of modern photography at George Eastman House in Rochester, N. Y.

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(Continued from Page 164)

cessary to stop down the lens quite a bit. And this is good. Closing the diaphragm will produce greater depth of focus, for one thing, and permit controlling the overall effect we get. Closing down the lens diaphragm will give a darker, more contrasty picture, while opening up will give a lighter, softer result. The best guide, of course, is to use an exposure meter, normally following its reading, but for effects, modifying exposure as required.

Let's take an actual example and see what can be done under normal conditions. Take the room represented in the diagram — a living room of average size. Our shot is to be made with a 15mm lens, centered on a person seated in a chair, and with the camera taking in a corner of the room. Beside the chair is a small table and on the opposite side a reading lamp. Now let's begin to light the scene. First we want to rough in our foundation light — the soft, general illumination from which we can build up our highlights. Starting with lamp "A" — a 500 watt photo lamp with a diffuser or No. 2 photoflood — we place it as shown to give soft, general illumination over the picture area. Used alone, it would give light sufficient for good exposure at a wide stop, but the picture would be flat and uninteresting. We could balance this, of course, with another similar unit placed on the other side of the camera, and perhaps a bit closer to the subject. This would result in fairly good lighting on subject and background. But if there is a dearth of lighting units, as with so many movie amateurs, we could get better lighting results with but a single front-light unit.

Now, what do we want next? First some highlights falling on the folds of that curtain in the background would relieve the flatness of that part of the set, so we'll place lamp "B" either on the bookcase at the left or on a high stand near it. This lamp can be either a 500-watt photo lamp or a photoflood. Either lamp will give the background highlights we desire and, if properly placed, can also simulate the light falling on the subject from the reading lamp "F." Not being diffused, the lamp will give harder, snappier illumination. The respective distances between the subject and lamps "A" and "B" can be regulated so as to get any desired balance. We should bear in mind, of course, that light from unit "B" should be slightly more intense than from "A" because it comes from what we have established as the highlight side of our picture.

Through the doorway, in the background, we will see a little of the room beyond, so there will have to be some light at this point. If the camera picks up enough of the room to warrant it, it might be advisable to cast some shadow patterns on the visible wall, using photofloods. However, all that may be necessary is to provide a lamp at "C" to throw

QUIZ a newsreel cameraman and you'll invariably find an Eyemo camera in his kit for getting those intimate closeup shots which highlight today's newsreel pictures. Here Brooklyn Dodgers' pitcher Rex Barney perfects his photogenic techniques for benefit of newsreel lensers with Eyemos poised for action

some light through the door into the scene. This unit should be placed high to give the illusion the light we see is falling naturally from an overhead light fixture. This will also provide an effective natural touch, by highlighting the edge of the draperies hanging in the doorway.

On the wall behind the subject, there is a small fixture, which we shall assume is fitted with an ordinary, flame-tinted 25-watt lamp. This can be lit, not for what it will add to the general illumination, but for the natural effect the glow will give. To accentuate this light, we can place a diffused spotlight — a reflectorspot will do — on the mantlepiece, focused on the wall fixture, so that it provides a soft patch of light immediately behind the fixture, representative of the natural glow from the fixture.

Now, in reality, such a lamp would also throw some light down on the furniture in front of it, and, of course, upon the people in the scene, too. The result would be a fine, edgelight or backlight. So we simulate this by placing a photoflood or reflectorflood at "D," in line between the chair and the wall fixture and in such a position that it is screened from the camera by the table beside the chair. This will give us the effect we want — a backlight on the edges of the chair, table and subject, separating them from the background.

Lamp "D" should be elevated as high as practicable, and placed well behind the subject, for it must be remembered that we are shooting this scene with a wide-angle lens. Therefore, a better effect will result if this lamp is raised a couple of feet from the floor and masked by the table. If we include the legs of the table in our shot, this lamp then may be placed at such an angle that, while still doing its primary work, will also provide backlighting on the table legs.

The main source of our apparent illumination is, of course, the reading lamp at "F." We can deal with this as seems most advisable: either by putting a photoflood in the lamp and using this illumination as part of our overall basic lighting, or merely place an ordinary 150-watt bulb in the lamp to give enough light to suggest the lamp is a major light source, and utilize the light coming from the unit at "B" as our basic illumination.

Close study of this typical home movie set lighting illustration will enable the cine amateur to greatly improve his indoor photography. The cost of necessary lighting units may be very nominal. The No. 1 and 2 photofloods are so reasonable that every movie maker should have at least a dozen on hand at all times. Of course, these should never be used without reflectors, except where employed for effect lighting or replacing bulbs in read-

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ing lamps, etc. On the other hand, by using reflectorfloods and reflectorspots—the new photolamps with the reflectors built in—you save money and there is less equipment to handle and store. These units, expertly used, will enable the amateur to approach, if not duplicate, the general interior lighting technique seen in most professional motion pictures today. We might add, that some Hollywood studios are now using these lamps a great deal for lighting sets of moderate size, and with excellent results.

LIGHTING INTERIORS WITH SUNLIGHT

(*Continued from Page 166*)

ground seen through the window.

These effects, though, are among the more elementary ones we can get indoors If there are really fast lenses on the camera, say f/2 5 or faster, we can get away from the direct sunlight and its harsh illumination. There is really a surprising amount of light to be found admitted by windows through which the direct rays do not come — and it is a softer, diffused light which gives infinitely more satisfying photographic renditions. This softer light can often be reflected very satisfactorily, too, while if necessary, a beam of direct sunlight from another window can be directed around to the scene through use of stronger reflectors or mirrors Once one gets the hang of using reflectors, it becomes easy to juggle a beam of light from one reflector to another until it is placed exactly where it is needed

These reflector lightings can be made very successful on porches, too. A light-colored porch floor is in itself something of a reflector, incidentally Shooting into a porch presents little difficulty; but in shooting through or out from a porch, one should remember that the direct and reflected front light on the subject should be rather strong, so as to minimize the difference in exposure between the subject on the shaded porch and the more brilliantly illuminated background.

The reflectors mentioned here are essentially the same as those used by the movie studios — a large flat panel covered with a reflective surface of paint or aluminum foil However, a simple reflector that can be rigged in an emergency consists of a piece of white cloth, say a bed sheet, held up in the proper place to throw back some of the light into the shadowed side of the subject A very simple support for such a reflector can be made by taking two strips of light wood and fastening them together to form a T. In use, you simply attach the sheet to the crossbar of the T with pins or thumbtacks, and then attach the upright of the T to the back of a chair with strong twine or rubber bands. In order to set your bedsheet-reflector at the desired angle, put weights on the bottom of the sheet and adjust the angle by moving the chair forward or backward and by sliding the supporting bar higher or lower on the back of the chair. This type of reflector is useful mainly when the direct light is quite strong, for it reflects quite diffusely. Your projection screen can also be pressed into service as a reflector, in a similar way, too

But more often, a surface that has greater reflecting power will be needed. Here it is best to use a reflector more like those used professionally. You can make a reflector of this type easily. Cut a panel of plywood or wallboard about 3 feet square and coat one side with aluminum paint For a stronger reflective surface, use chrome aluminum paint, or sheet foil cemented to the flat surface. Provide a length of stick as a prop, and you're all set.

The serious movie maker will provide himself with one or more reflectors, and these should be made to fold conveniently for easy carrying and storage For this, simply cut the panel of plywood or wallboard down the middle and hinge the two pieces at the center. Small cupboard hinges will do for the plywood. Gummed bookbinder's tape, from the stationer's, will serve as a hinge for the wallboard. A hinged, wooden leg at the back will support the reflector at any desired angle. If the reflectors are going to be used indoors a second leg can be hinged at the bottom and notched to receive the upper leg, thus providing a slip-free support for indoor use.

Where an extremely "hard" reflected light is required, you may use a sheet of bright tin or a large mirror; but the light from such surfaces is so intense that it is not very pleasing photographically, except when used to throw light into a deeply shadowed background; also it is hard to control.

On the other hand, where it is desired to soften the direct light through a window, this can be done by covering all or part of the window with cheese cloth.

The color of the room in which you are working will have a very important bearing on the quality of picture you will get, when utilizing sunlight for illumination. If the walls and draperies are dark, they will naturally reflect very little light — possibly not enough to register an impression on the film; and about all that you will get is whatever is in the path of the direct light coming through the

window, or in the beams of the reflectors. On the other hand, if the walls are light, they will reflect more of the light, resulting in a better picture.

Following the same idea to its logical conclusion, we can make a very few lights go a long way if we supplement them with daylight — and still farther if we use reflectors. For instance, using sunlight and a reflector to light a subject, we would probably lose most of the background; but if we add a single lamp, a photoflood in a reflector, we can add enough general illumination to reveal background detail fairly well. As the strength of the illumination varies as the inverse square of the distance between the lamp and the subject, we can balance our natural and artificial lighting simply by moving the lamp toward or away from the subject.

Where filming is done in Kodachrome, this mixed lighting procedure must be given special attention in that blue "daylight" photofloods must be used, for the artificial light source, in order to match the color temperature of the daylight.

MAKING PUNCHES LOOK REALISTIC

(*Continued from Page 161*)

taking some of the punching impact, is the weight of the cameraman pressing against the body rest.

The camera records with a wide angle lens operating at a speed of 32 frames per second to slow the screen action slightly.

We used this gadget in shooting action closeups of both Montalban and his opponent. For these shots it was hoisted into the boxing ring, so that the shots would include the true backgrounds of the boxing arena. Grips moved the gadget on its casters during the action so the camera would swing around the arena with movement of the boxer.

In spite of the great pains taken by the studio to provide this device, making possible some of the most realistic boxing shots ever recorded for a feature motion picture, it is quite possible the average theatre-goer, seeing the picture, will fail to appreciate these scenes and the steps taken to obtain them because, for one thing, these shots, constituting the climactic highpoint of the picture, will receive tight, staccato cutting in the editing. "Right Cross" is an action-packed story woven around a triangle love affair between a newspaper man, a girl and a prizefighter. Realism in the crucial prizefight scenes gives it its big moment, thanks to an imaginative director and the inventive genius of John Arnold.

The cameramen? Well, they contributed something, of course. They proved the validity of the idea — made it work.

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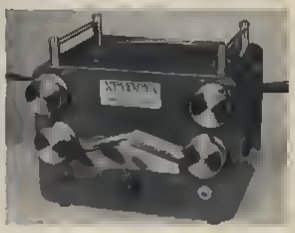

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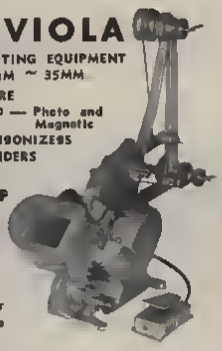

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MOTION PICTURE LIGHTING FOR TELEVISION

(*Continued from Page 162*)

ternating with banks of 500-watt Fresnel spots. These are augmented by numerous floor units—Mole-Richardson "Juniors" and "750's." Then there are several 5000-watt MR's for backlighting. In addition, "Juniors" are mounted on several vertical parallels that extend perhaps 35 feet in height and fitted with casters for mobility. Out front, flanking the cameras at either side, are several spots of different sizes on stands which serve as front fill lights.

Only incandescent lights are used. Various other studios, of course, have their own pet lighting equipment — fluorescents, photofloods, etc.—and there will always be arguments tending to prove or disprove the advantages claimed for one type light over another. In the case of the Ed Wynn Show, standard motion picture lighting units have given the best results

As may be seen, format of the show, which predetermines position of the cameras, precludes changing the lighting for different camera angles Thus, lighting must be carefully planned in advance — during rehearsals — so that it is adequate for all the acts, for any of the players, no matter what their position on the stage. When the curtain fal's on one of the specialty acts, and Ed Wynn takes over out front, it is possible to make some slight adjustment of the floor lamps for the act to follow, if necessary.

Peterson emphasizes it is important for best picture results to get the bulk of the lighting from the front and sides, and not from overhead. One of the shortcomings of so many TV shows, he points out, is that dominant lighting comes from overhead with the result that there is always strong highlights on the players' foreheads, noses and chins, with consequent shadows beneath the eyes, nose and chin.

Occasionally it is possible to make dimmer changes, say on a girl vocalist, for example, when her position on stage can be predetermined at rehearsals and insured by cue marks on the floor. But ordinarily, whether the shots are to be closeups or long shots, in full or open stage, a jail setting or a living room scene — all have to be handled with the lights in the same position as established before the show goes on the air.

Another disturbing factor invariably encountered is mike boom shadow, a problem not unfamiliar on movie sound stages "In television," Peterson says, "we have to anticipate the mike boom movement for the entire show and take it into consideration when placing our lights. It frequently happens that the situation gets entirely beyond control, during a show, particularly if a player's enthusiasm carries him beyond the limits intended."

In motion picture set lighting, the usual practice is to set the key light and

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then add fill lights. In television, and particularly with the Ed Wynn Show, a certain amount of overall illumination is first established, then the key and highlights are added

It is logical that Peterson would bring to television some of the lighting kinks employed in motion pictures. At CBS, he has succesfully applied "gimmick" lights in illuminating certain sets These are small practicals — 25 or 50 watt lamps — or photofloods or reflectorflood lamps placed strategically about the set and concealed so as to produce subtle effect-lighting

Heretofore, much of television photography has lacked the highlights coming through open doorways and windows, and the effective relief lights on people and objects within the set, which are standard procedure in motion picture set lighting. Gus Peterson is bringing these to television through the Ed Wynn Show.

He is also credited with introducing to television for perhaps the first time the use of cookaloras or "cookies" as they are better known in the parlance of movie set lighting. These are panels of opaque material — plyboard, wallboard, etc. — perhaps 15 by 20 inches in size, with irregular designs punched or cut out. When placed before a light source, they break up the light into a pleasing, varied pattern for pictorial or mood effects.

In charting the lighting for the Ed Wynn Show, front lighting usually is established at 65 foot candles. Then highlights are added as necessary to obtain the desired balance

When the show goes on the air, Peterson presides over the lighting controls and directs any changes from a position in the wings, where he keeps watch on the end result with the aid of a monitoring receiver One or more of his assistants control the lights by operating switches or dimmer banks on cues relayed by sign language or through instructions received through small "walkie-talkie" type one-way communicators. During rehearsals, Peterson works closely with engineer Ed Miller, observing the effect of his lighting through the camera's electronic viewfinder. He is appreciative of the splendid cooperation given him by Miller, Herb Pangborn and the other television engineers at CBS for the aid they have given him in his work.

Aiming at still further improvement in lighting for television, Peterson is preparing to launch a series of tests in which diffusers and neutral density filters will be used both of which have not proved practical to date for television. But they remain two of his "preconceived" notions mentioned earlier, which he believes can be effectively employed to further raise the quality of video lighting and photography, especially for dramatic and variety shows.

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Joel Fox Photo Equipment, 6539 Santa Monica Blvd., Hollywood, announce a new developing machine for 16mm. and 35mm. motion picture film, color black and white or reversal. Designed by Art Reeves, new machine has many exclusive features, according to manufacturer making it ideal for studio or professional laboratory use. Complete details and price may be had from manufacturer.

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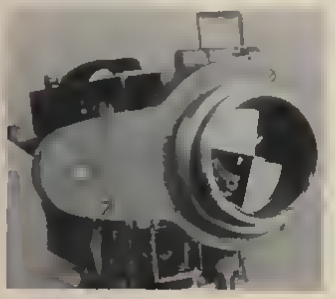

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(*Continued from Page 156*)

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Warner Brothers

■ WILFRID CLINE, "Tea For Two," (Technicolor) with Doris Day, Gordon MacRae, Eve Arden, S. Z. Sakall, and Gene Nelson. David Butler, director.

● TED MCCORD, "The Breaking Point," with John Garfield and Patricia Neal. Michael Curtiz, director.

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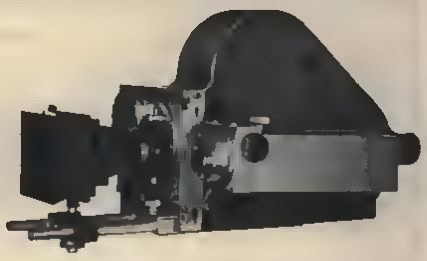

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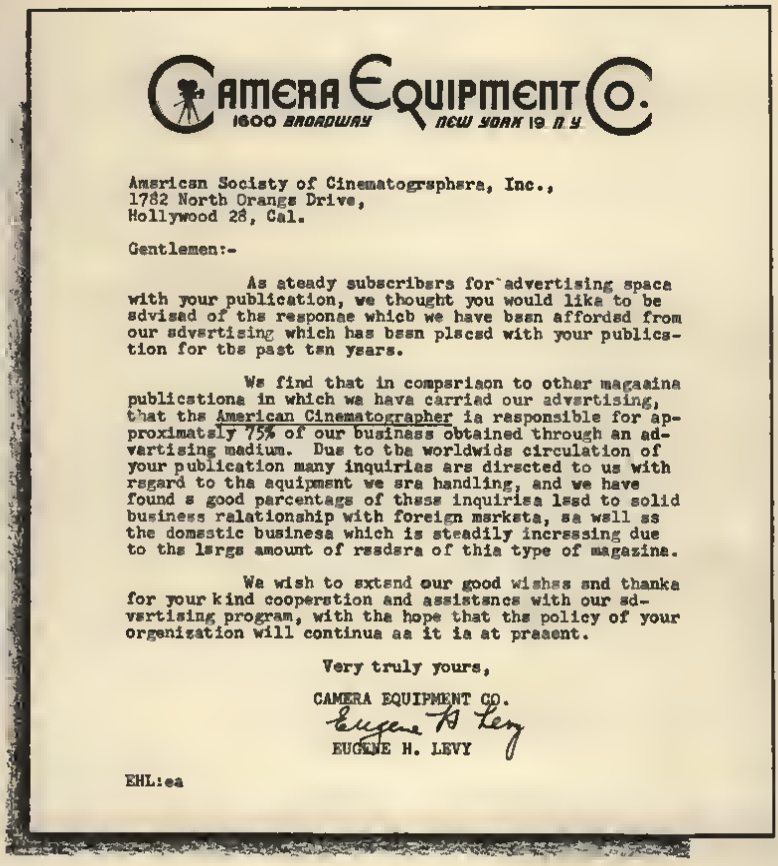

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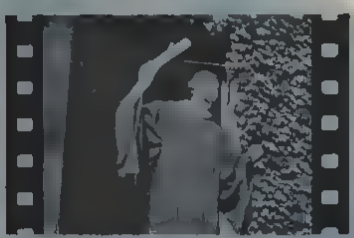

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